

WHAT IS CLAIMED IS:

1. A fiber optic cable stripping tool for removing a layer of insulation from a fiber optic cable having an optical glass core, an annular glass cladding layer arranged concentrically about the core, and at least one annular layer of insulation 5 arranged about the glass cladding layer, comprising:

(a) first and second operating members pivotally connected intermediate their ends by a pivot pin, thereby to define on opposite sides of said pivot pin a pair of handle portions and a pair of stripping portions, respectively, said operating members being pivotally displaceable between closed and 10 open conditions in which adjacent surfaces of said stripping portions are adjacent and separated from each other, respectively;

(b) spring means normally biasing said operating members apart toward said open condition; and 15

(c) means defining a plurality of opposed longitudinally-spaced stripping recesses in each of the adjacent faces of said stripping portions, said stripping recesses cooperating when said operating members are in said closed condition to define a plurality of stripping openings that progressively increase in size in the direction away from said pivot pin, the walls of 20 each of said stripping recesses being relieved to define sharp knife edges, whereby when the operating members are in the open condition and a fiber optic cable is inserted within a recess of corresponding size, displacement of said operating 25

members to said closed condition causes said knife edges to sever at least the outer layer of insulation, thereby to permit the longitudinal removal of the severed insulation portion from the cable.

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2. A stripping tool for fiber optic cables as defined in claim 1, and further including:

10 (d) adjustable calibration means for limiting the extent of travel of said first operating member in the direction of said second operating member, thereby to control the relative positions of said operating members when in the closed insulation-severing condition.

3. A stripping tool for fiber optic cables as defined in claim 2, wherein said calibration means includes:

15 (1) a calibration body secured to the stripping portion of one of said operating members adjacent said pivot pin, said calibration body extending adjacent the other of said operating members in a direction parallel with said pivot axis, and

20 (2) a calibrating screw threadably mounted for axial adjustment in a through bore contained in said calibration body, said calibrating screw extending toward the other of said operating members for engagement with a first stop surface carried thereby.

4. A stripping tool for fiber optic cables as defined in claim 3, wherein said calibration body is arranged to engage a second stop surface on said other operating member to limit the travel thereof toward the open condition.

5. A stripping tool for fiber optic cables as defined in claim 2, wherein the remote edges of the adjacent surfaces of said stripping portions of said operating members are chamfered to define a pair of parallel chamfered surfaces each containing said recesses, and further wherein each of said recesses is V-shaped and includes a pair of flat side walls, respectively.

6. A stripping tool for fiber optic cables as defined in claim 5, wherein the apices defined between the side walls of said V-shaped recesses are parallel.

7. A stripping tool for fiber optic cables as defined in claim 6, wherein each of said operating members is formed of stainless steel; and further wherein each of said recess wall surfaces and each of said chamfered surfaces is formed by grinding with a precision diamond head rotary grinding tool.

15 8. A stripping tool for fiber optic cables as defined in claim 2, and further including:

(e) locking means for locking together said operating members when said locking members are in said closed condition.

9. A stripping tool for fiber optic cables as defined in claim 8, wherein 20 said locking means comprises a generally L-shaped locking member pivotally connected to one of said operating members, said locking member being pivotally

operable between locked and unlocked positions relative to a locking surface on the other of said operating members.

10. A stripping tool for fiber optic cables as defined in claim 9, wherein said locking lever is arranged near said pivot pin for operation by the forefinger of a 5 user of said stripping tool.

11. A stripping tool for fiber optic cables as defined in claim 2, and further including gripping means defined on the adjacent surfaces of the free extremities of said stripping portions for gripping an article placed therebetween when said operating members are displaced from said open condition toward said closed 10 condition.

12. A stripping tool for fiber optic cables as defined in claim 2, wherein when the operating members are in the closed condition, the adjacent surfaces of the stripping portion arranged at an angle of about 29° relative to the longitudinal axes of the handle portion, thereby to avoid wrist bend and to prevent carpal tunnel 15 syndrome over repeated use.

13. A stripping tool for fiber optic cables as defined in claim 12, wherein each of said handle portions includes a cushioned outer hand-grip layer.

14. A stripping tool for fiber optic cables as defined in claim 2, wherein the size of the first cable stripping opening adjacent said pivot pin is such as to sever 20 simultaneously a 900 µm buffer insulation layer and a 250 µm acrylate layer for the

longitudinal stripping thereof off of a 2.0 mm to 3.0 mm fiber optic cable having a 50 μ m to 62.5 μ m glass core.

15. A stripping tool for fiber optic cables as defined in claim 14, wherein the size of the adjacent second cable stripping opening is such as to sever the 900 μ 5 buffer insulation layer for the longitudinal stripping thereof off of the fiber optic cable.

16. A stripping tool for fiber optic cables as defined in claim 15, wherein the size of the adjacent third cable stripping opening is such as to sever the outer insulation jacket for the stripping thereof off of a 2.0 to 2.4 mm fiber optic cable.

10 17. A stripping tool for fiber optic cables as defined in claim 16, wherein the size of the adjacent fourth cable stripping opening is such as to sever the outer insulation jacket for the stripping thereof off of a 2.0 to 3.0 mm loose tube multiple fiber optic cable.

18. A stripping tool for fiber optic cables as defined in claim 17, wherein 15 the adjacent fifth stripping opening is of such a size as to sever the outer insulation jacket of a 2.8 mm to 3.0 mm fiber optic cable.